



Department of
AGRICULTURE
Laboratory
Division

Consumer Protection Program
2002 Annual Report
(10/01/2001 through 09/30/2002)

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LABORATORY DIVISION CONSUMER PROTECTION SECTION

Michigan Department of Agriculture Priorities

- Food Safety and Security
- Environmental Stewardship
- Animal, Plant Health, and Protection
- Viable Agriculture Development
- Consumer Protection
- Homeland Security

MDA Laboratory Division Consumer Protection Section Mission Statement

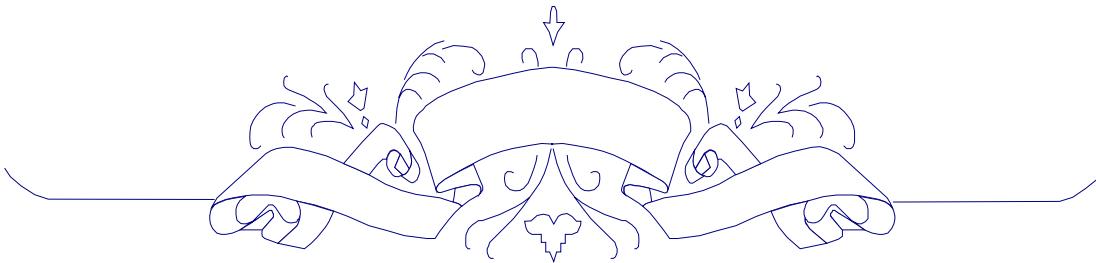
- Prevent economic fraud and deception concerning weights and measures, motor fuels quality, labeling and advertising of all commodities.
- Be responsible for environmental issues as they relate to the distribution of gasoline products.
- Provide National Institute of Standards and Technology (NIST) traceability on the state's standards and measures.
- Provide regulatory resource expertise to the public, industry, and government.

Michigan Department of Agriculture
Dan Wyant, Director
Keith Creagh, Deputy Director

Laboratory Division
Tom Whalen, Division Director
Patrick Mercer, Section Director

Foreword

Weights and measures activities touch every consumer, industry and visitor in the U.S., impacting commerce by more than \$4.13 trillion a year. Acknowledging the important work performed by Michigan's weights and measures officials, the governor annually issues a proclamation designating the first week in March as Michigan Weights and Measures Week.



EXECUTIVE DECLARATION

Governor John Engler
Hereby issues this Executive Declaration
in observance of
March 1 - 7, 2002
as
WEIGHTS AND MEASURES WEEK

WHEREAS, the Weights and Measures Program of the Michigan Department of Agriculture Laboratory Division serves to meet the public need of standard weights and measures in the State of Michigan; and

WHEREAS, the employees of the Weights and Measures Program are responsible for ensuring that all weighing and measuring devices used in public sales are accurate; and

WHEREAS, weights and measures activities had an estimated economic impact of over \$150 billion in Michigan in 2001; and

WHEREAS, the national theme of "Meeting Consumer's Needs through Weights and Measures" coincides with the continued technological advancement in the marketplace and Michigan's role as a leader in our nation's economic recovery; and

WHEREAS, each year, the first week in March is set aside to commemorate the enactment of our nation's first Weights and Measures Law in 1799, and to increase public awareness of the importance of this law;

NOW, THEREFORE, I, John Engler, Governor of the State of Michigan, do hereby declare March 1-7, 2002, as WEIGHTS AND MEASURES WEEK in Michigan, in conjunction with the national celebration of the 203rd anniversary of our nation's Weights and Measures Law.

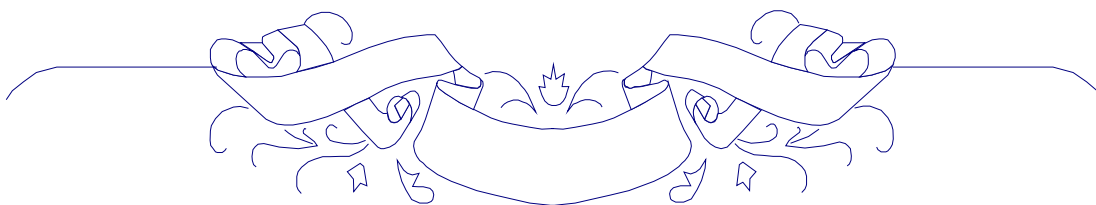


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GENERAL INFORMATION AND STATISTICS

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Establishments Licensed

Gasoline Retail Outlets	5,172
Total Licenses Issued	5,898

NOTE: Total licenses issued exceeds the number of actual gasoline retail outlets due to ownship turnover and business openings and closings.

* * * * *

Certificates Issued

Livestock Weighmasters	1
Service Person Registrations	10

* * * * *

Formal Complaints Investigated

Weights and Measures	837
Gasoline (Quality)	159
TOTAL	996

* * * * *

Motor Fuels Quality Hotline (1-800-MDA-FUEL)

Complaints Received and Responded	811
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NOTE: Complaints outside of the program's responsibility were referred to the appropriate agency for response.

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Freedom of Information Act

Requests Received and Processed	13
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ENFORCEMENT ACTIONS

Hearings and Compliance Meetings

	<u>Compliance Meetings</u>	<u>Hearings</u>	<u>License Revocations</u>
Violation of Michigan Motor Fuels Quality Act, P. A. 44 of 1984, as amended.	22	2	0
Violation of Michigan Weights and Measures Act, P. A. 283 of 1964, as amended.	12	0	NA
TOTAL	34	2	0

By Violation

	<u>Warning Letters</u>	<u>Administrative Actions</u>	<u>Prosecutions</u>
Violation of Michigan Motor Fuels Quality Act, P. A. 44 of 1984, as amended.	580 *	72 **	0
Violation of Michigan Weights and Measures Act, P. A. 283 of 1964, as amended.	127	6	1
TOTAL	707	78	1

*This number includes 17 warning letters sent for distributor related violations.

**This number includes 26 administrative fines due to delinquent licenses and nine administrative fines

Fines/Costs for Prosecutions, Administrative Fines, and Consent Agreements

Violation of Michigan Motor Fuels Quality Act, P. A. 44 of 1984, as amended.	\$38,778*
Violation of Michigan Weights and Measures Act, P. A. 283 of 1964, as amended.	\$113,900
Violation of Michigan Consumer Pricing and Advertising Act, P.A. 449 of 1976, as amended.	\$275,000
TOTAL	\$427,678

*Administrative fines are authorized under P.A. 44 of 1984.

Stop Sale and Seizure Information

<u>Reason</u>	<u>Seizures</u>	<u>Amount(\$)</u>	<u>Amount(Lbs)</u>
Short Weight/Measure	46	\$19,313	24,810
<u>Reason</u>			<u>Stop Sales</u>
Water in Underground Storage Tank			73
Quality Standards Not Met			6
TOTAL			79

SECTION ACTIVITIES AND PHOTOGRAPHS

Senior Motor Fuels Quality Enforcement Specialist Catharine Hinkley utilizes a hand-held field octane analyzer. The unit is used to sample and audit octane-labeling compliance at gas stations.

Metrology Laboratory Program Manager Craig VanBuren uses the Mettler Toledo AX16004 to calibrate test weights in the state-of-the-art small mass laboratory. Thousands of high precision mass standards are calibrated annually for industry, service companies, and Michigan's legal metrology (enforcement programs).

Senior Weights and Measures Inspector Dennis Johnson conducts a retail gasoline meter dispenser test. Multiple product test units allow staff to conduct several tests on varying products before having to return products to their respective storage tanks.

Senior Weights and Measures Inspector Dennis Johnson conducts tests on computerized terminal meters. Weights and measures staff conduct tests on a wide variety of meters, including terminal, vehicle tank, liquefied-petroleum gas (LPG), and retail gas station's high speed diesel.

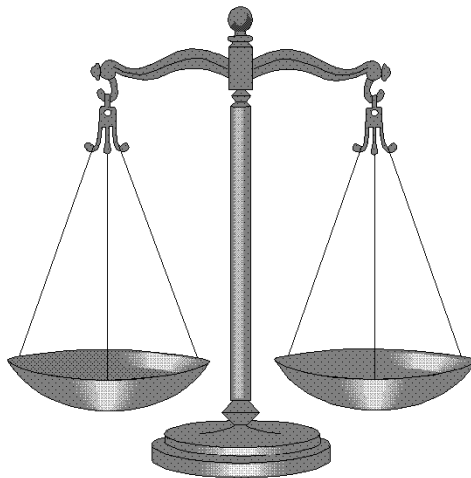
Metrologist Terry Gawel readies the Morehouse proving ring prior to testing wheel load weighers (portable axle scales). Approximately 600 of these devices are tested annually for the Michigan State Police, county sheriff departments, city, and township weighmasters. These scales are key in enforcing Michigan's load limit laws and protecting our roads.

Motor Fuels Quality Enforcement Specialist Danielle Allison collects a sample of gasoline to be tested to ensure it meets the state-established performance and environmental standards. Motor fuels quality staff collected over 1,200 samples from licensed retail gasoline outlets in fiscal year 2002.

METROLOGY LABORATORY

After many hours of fine tuning laboratory systems to the new ISO/IEC-17025 requirements, this year marked another successful audit and accreditation of the National Voluntary Laboratory Accreditation Program (NVLAP). In addition, temperature calibrations were also added to MDA's scope of accreditation. The laboratory also received continued traceability to the National Institute of Standards and Technology (NIST) with the receipt of the NIST Certificate of Measurement Traceability. Michigan Department of Agriculture's E. C. Heffron Metrology Laboratory stands as one of the top state metrology laboratories in the country and is accredited at the highest calibration level for mass standards (Echelon I).

Fiscal year 2002 saw a 12 percent increase in the number of mass and volume artifacts calibrated. This number includes items calibrated both for the state's enforcement and inspection programs as well as private industry and other state labs.

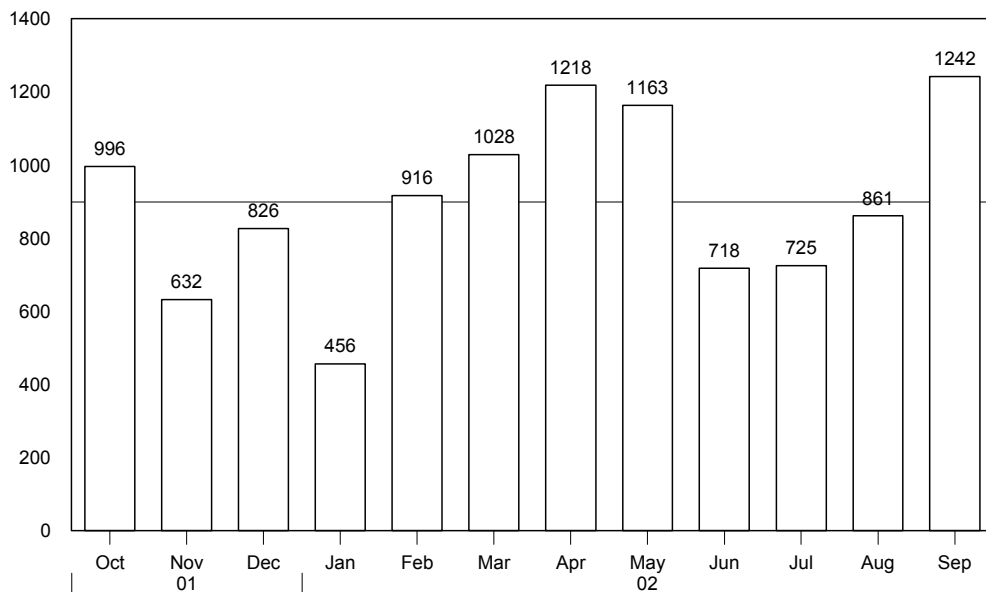


LABORATORY ACTIVITIES

Mass standards are test weights used by industry, service companies, and enforcement programs to determine the accuracy of weighing devices. They vary in size from 6,000 pounds to 1 micropound and from 500 kilograms to 1 milligram.

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Mass Standards Calibrated by Month



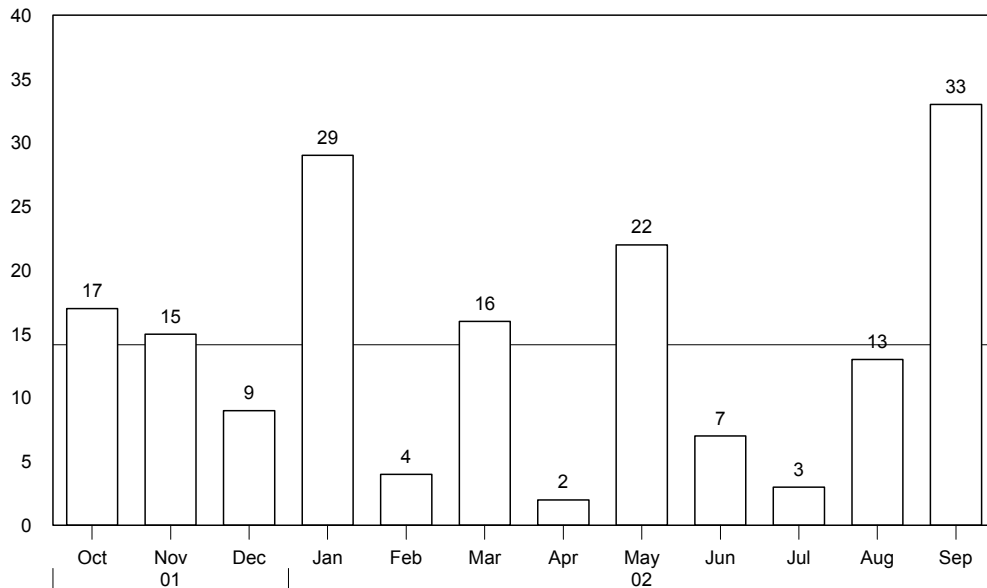
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Mass Standards Testing Results

	<u>Approved</u>	<u>Adjusted</u>	<u>Condemned</u>
October	991	146	5
November	627	61	5
December	818	81	8
January	455	21	1
February	914	64	2
March	1,023	67	5
April	1,206	174	12
May	1,158	107	5
June	714	47	4
July	723	69	2
August	857	81	4
September	1,239	46	3
TOTAL	10,725	964	56

Volumetric standards are used in the testing of liquid measuring devices such as gas pumps, fuel oil and liquid petroleum gas (LPG) measuring meters.

Volumetric Standards Tested by Month



Volumetric Standards Testing Results

	<u>Approved</u>	<u>Adjusted</u>	<u>Condemned</u>
October	17	11	0
November	15	6	0
December	9	4	0
January	29	10	0
February	4	2	0
March	16	11	0
April	2	1	0
May	22	2	0
June	7	5	0
July	3	1	0
August	13	1	0
September	33	11	0
TOTAL	170	65	0

Additionally, laboratory staff tested 5 linear measures and 600 wheel load weighers used in primary and secondary road load enforcement for local jurisdictions.

WEIGHTS AND MEASURES PROGRAM

A major revision of the Michigan Weights and Measures Act, P.A. 283 of 1964, as amended, was completed and signed into law on April 29, 2002. The revisions updated the standards for commercial weighing and measuring devices from the 1982 to the 2002 edition of the National Institute of Standards and Technology (NIST) Handbook 44. This change alone enables Michigan consumers and businesses to more ably benefit from advances in commercial weighing and measuring technology. The revision also adopts several uniform regulations, including the "Uniform Regulation for the Method of Sale of Commodities;" the "Uniform Packaging and Labeling Regulation;" and the "Uniform Regulation for the Voluntary Registration of Service Persons and Service Agencies for Commercial Weighing and Measuring Devices;" all published in the 2002 edition of NIST Handbook 130. In addition, the revisions fully adopt the requirements for utilizing commercial devices that have a National Type Evaluation Program (NTEP) Certificate of Conformance, which further ensure that commercial devices in use in Michigan are capable of meeting Weights and Measures Act requirements. In addition to the establishment of non-judicial civil penalties, criminal penalties for those found in violation of the Act were also increased, with the expectation that the possibility of a substantial fine and possible prison term will dissuade those considering committing economic fraud. The impact of weights and measures activities on transactions based upon weight, measure, or count is great with an estimated value of over \$171 billion (2000). The updates to the Act will help enhance consumer confidence in this significant marketplace.

* * * * *

Weights and Measures Undercover Activities

Consumer Protection Section employees are equipped with unmarked vehicles holding calibrated false tanks which they use to conduct unannounced dispenser accuracy checks.

Following are the results of these unannounced purchases during fiscal year 2002:

Number of Purchases	759
Number of Shortages $\geq 1.0\%$	31
Percentage of Purchases $\geq 1.0\%$ Short Measure	4.08

GENERAL WEIGHTS AND MEASURES INFORMATION AND STATISTICS

* * * * *

Weights and Measures Complaints Investigated

Retail Motor Fuels Dispensers	570
Short Weight/Measure	51
Item Pricing and Accuracy	204
All Other Complaints	12
TOTAL	837

* * * * *

Disposition of Violations

Compliance Meetings	12
Warning Letters	127
Consent Agreements	6
Prosecutions	1
Seizures	46
Fine Amounts	\$113,900

STATE INSPECTIONS

* * * * *

Establishments Visited by Type

Food Processing Plants	41
Gasoline Stations	1,614
Grain Elevators	234
Grocery Stores	356
Hardware Stores	14
Livestock Scales	9
Manufacturing Plants (non-food)	51
Petroleum Products Distributors	535
Produce Markets	6
Scrap Metal Dealers	128
All Other Establishments	844
TOTAL	3,832

These establishments were visited by inspectors to check weighing and measuring devices and reweigh commodity packages.

* * * * *

Net Content Inspections

	<u>Surveys</u>	<u>Packages</u> <u>Approved</u>	<u>Packages</u> <u>Rejected</u>	<u>Compliant (%)</u>	<u>Lots</u> <u>Approved</u>	<u>Lots</u> <u>Rejected</u>	<u>Compliant (%)</u>
Field	225	990	274	78.32	42	111	27.45

Devices Inspected

<u>Commercial Device Type</u>	<u>Approved</u>	<u>Condemned for Repair</u>	<u>Condemned for Use</u>	<u>Compliant (%)</u>
Animal/Livestock Scale	10	0	0	100.00
Counter Scale	1,825	129	44	91.34
Crane Scale	10	0	1	90.91
Fuel Truck Meter	577	33	33	81.46
Gasoline Blend Meter	2,035	590	108	74.46
Gasoline Meter	5,186	880	300	81.46
Hopper Scale	17	0	1	94.44
LPG Meter (25 GPM or less)	87	3	2	94.57
LPG Meter (over 25 GPM)	228	20	6	89.76
Mass Flow Meter	1	1	0	50.00
Platform Scale (1,500 lbs or less)	614	7	11	97.15
Platform Scale (over 1,500 lbs)	68	6	5	86.08
Single Product Meter (over 25 GPM)	722	146	23	81.03
Terminal Meter	24	0	4	85.71
Track Scale	7	0	0	100.00
Vehicle Scale (2 section)	148	11	18	83.62
Vehicle Scale (4+ section)	671	127	97	74.97
TOTAL	12,230	1,953	653	82.43

<u>Miscellaneous Devices/Standards</u>	<u>Approved</u>	<u>Condemned for Repair</u>	<u>Condemned for Use</u>	<u>Compliant (%)</u>
Weights (Field Tested)	1,095	0	3	99.73

DETROIT OFFICIALS' INSPECTIONS***Devices Inspected**

	<u>Inspected</u>	<u>Approved</u>	<u>Rejected</u>	<u>Compliant (%)</u>	<u>Re-Inspected**</u>
Taximeter	1,321	1,183	138	89.55	128

*The City of Detroit is the only remaining non-state jurisdiction in Michigan.

**All re-inspected devices met standards and were approved.

MOTOR FUELS QUALITY PROGRAM

Consumers have a lot at stake when they pull up to a gasoline pump. The average family sedan costs \$22,000 and uses over 750 gallons of gasoline each year. Just one purchase of poor quality gasoline could result in thousands of dollars of damage or premature engine wear to the consumer's vehicle. Increased fuel prices make gasoline fraud a more lucrative proposition for the unscrupulous gasoline marketer. Gasoline fraud also negatively impacts industry and creates an unlevel playing.

In Fiscal Year 2002, the Michigan Legislature enhanced consumers protection by raising the fines for violating the Michigan Motor Fuels Quality Act, P.A. 44 of 1984, as amended, and stabilizing program funding through increased license fees.

Inspectors tested the quality of gasoline at over 3,000 of the state's 5,172 retail establishments. Due to the new fine increases, use of stop sales, and other enforcement mechanisms in 2002, the department was able to make significant strides in improving the overall quality of the gasoline sold in Michigan. Gasoline quality compliance rose to 90 percent, a 3 percent increase over the previous year. To continue compliance efforts, another 580 marketers were warned of pending enforcement action if repeat violations were identified.

GENERAL MOTOR FUELS QUALITY INFORMATION AND STATISTICS

Establishments Licensed

Gasoline Retail Outlets	5,172
Total Licenses Issued	5,898

Disposition of P.A. 44 Violations

Compliance Meetings	22
Warning Letters	580
Administrative Fines	72
Prosecutions	0
Stop Sales	79
Fine Amounts	\$38,778

Stop Sale Information

<u>Reason</u>	<u>Stop Sales</u>
Water in Underground Storage Tank	73
Quality Standards Not Met	6
TOTAL	79

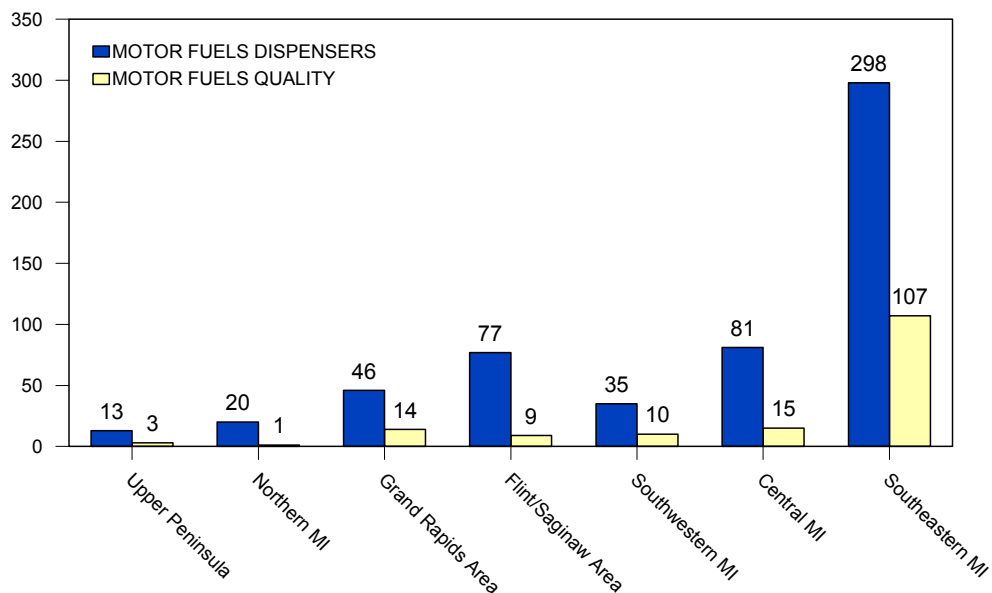
Complaint and Motor Fuels Quality Hotline Information

Complaints Received through 1-800-MDA-FUEL*	811
Gasoline Quality Complaints Investigated	159

**NOTE: Complaints outside of the program's responsibility, received via the MFQ Hotline, were referred to the appropriate agency for response. All gasoline quality complaints were investigated.*

PROGRAM ACTIVITIES

Complaints Investigated by Region



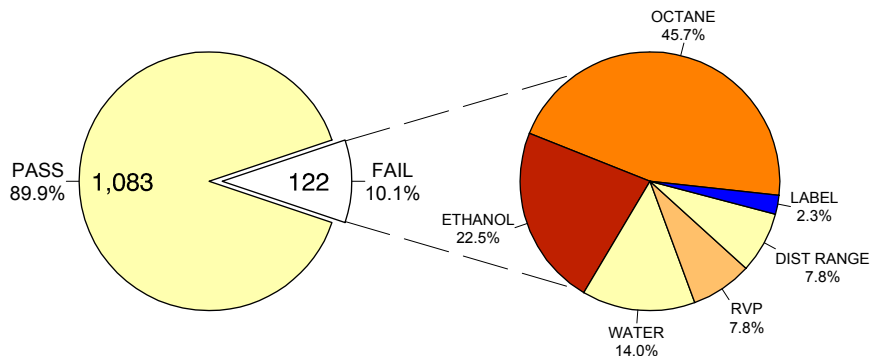
In addition to licensing and inspecting all retail outlets and responding to complaints, Motor Fuels Quality Program staff regularly procure samples and audit gasoline quality with portable Zeltex octane analyzers.

Following are the results for fiscal year 2002:

Samples Procured

Results	Number
Approved	1,083
Warning Letters	92
Non-actionable	5
Administrative Fines	25
Total	1,205
Zeltex Audits	2,572

Violation Rate and Breakdown



Samples were procured for the following reasons: a monthly random/stratified program, ongoing investigations, consumer complaints, or to assure establishment compliance when there has been a previous violation.

* * * * *

Sample Results by Sampling Method

<u>Sampling Method</u>	<u>Number of Samples</u>	<u>Number of Violations</u>	<u>Compliant (%)</u>
Routine	600	41	93.17
Complaint	179	32	82.12
Re-sample	126	19	84.92
Investigation	52	11	78.85
Confidential/Undercover	97	5	94.85
Other	151	14	90.73
TOTAL	1,205	122	89.88

* * * * *

Sample Results by Octane ((R+M)/2)

<u>Octane (AKI)</u>	<u>Number of Samples</u>	<u>Number of Violations</u>	<u>Compliant (%)</u>
86	17	5	70.59
87	410	18	95.61
89	251	24	90.44
90	4	1	75.00
91	10	1	90.00
92	111	16	85.59
93	373	49	86.86
94	28	7	75.00
Other	1	1	0.00
TOTAL	1,205	122	89.88

* * * * *

Sample Results by Region

<u>Region</u>	<u>Number of Samples</u>	<u>Number of Violations</u>	<u>Compliant (%)</u>
Upper Peninsula	140	18	87.14
Northern MI	84	6	92.86
Grand Rapids Area	100	14	86.00
Flint/Saginaw Area	189	13	93.12
Southwest MI	87	11	87.36
Central MI	123	7	94.31
Southeast MI	482	53	89.00
TOTAL	1,205	122	89.88

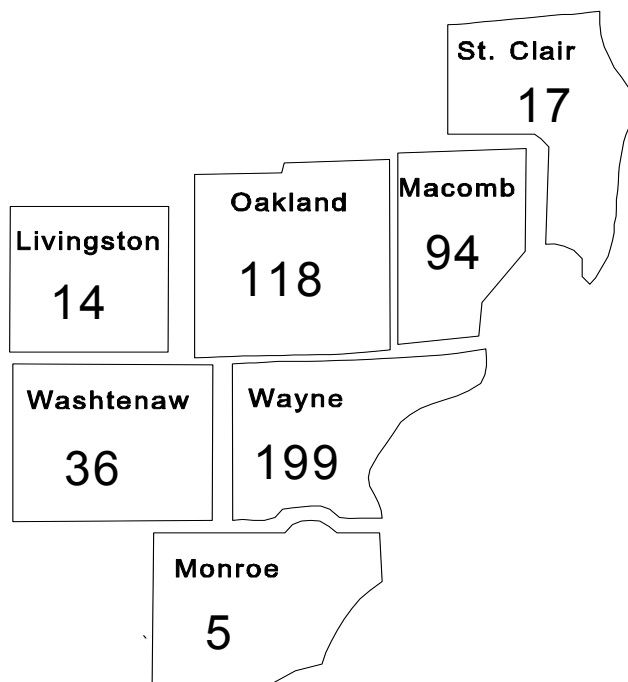
VAPOR RECOVERY AND REDUCTION PROGRAM

During 2002, Motor Fuels Quality Program staff monitored gasoline volatility at over 570 gasoline dispensing facilities. The goal is to ensure that volatile organic compounds do not escape into the atmosphere at a rate higher than 28 tons per day during the summer months. Specifically, dispensing facilities in the seven-county attainment area (see below) are required to dispense a lower Reid Vapor Pressure gasoline (7.8 psi or 8.8 psi with ethanol) from June 1 to September 15. Monitoring efforts assisted Southeast Michigan in maintaining National Ambient Air Quality Standards. One facility was found dispensing high volatility gasolines during the ozone season.

* * * * *

As part of the Vapor Recovery and Reduction Program, staff perform field audits from June 1 through September 15 on gasoline dispensed in the seven-county ozone attainment area (Livingston, Macomb, Monroe, Oakland, St. Clair, Washtenaw and Wayne counties).

Number of Field Audits Per County



Field Audit and Sample Results

	<u>Field Audits</u>	<u>Official Samples</u>	<u>TOTAL</u>
Number of Establishments	481	130	574
Number Conducted	483	152	635
Number of Establishments in Violation	0	1	1
Establishment Violation Rate (%)	0.00	0.77	0.17

** Multiple field audits were conducted, and multiple samples were collected at some establishments, due to violations.*

Field Audits without Ethanol (7.8 psi RVP limit)

<u>Octane</u>	<u>RVP Average</u>	<u>Number of Field Audits</u>	<u>Number of Violations</u>
86	-	-	-
87	7.51	307	0
88	-	-	-
89	7.43	40	0
90	7.64	1	0
91	-	-	-
92	7.51	5	0
93	7.40	31	0
94	-	-	-
TOTAL	7.49	384	0

Field Audits with Ethanol (8.8 psi RVP limit)

<u>Octane</u>	<u>RVP Average</u>	<u>Number of Field Audits</u>	<u>Number of Violations</u>
86	8.78	19	0
87	8.72	61	0
88	-	-	-
89	8.76	14	0
90	-	-	-
91	-	-	-
92	8.55	2	0
93	7.41	1	0
94	8.72	2	0
TOTAL	8.72	99	0



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